

Title (en)

FAST REROUTE FOR BUM TRAFFIC IN ETHERNET VIRTUAL PRIVATE NETWORKS

Title (de)

SCHNELLES UMLEITEN FÜR BUM-VERKEHR IN VIRTUELLEN PRIVATEN ETHERNET-NETZWERKEN

Title (fr)

RÉACHEMINEMENT RAPIDE POUR TRAFIC BUM DANS DES RÉSEAUX PRIVÉS VIRTUELS ETHERNET

Publication

EP 4047883 A1 20220824 (EN)

Application

EP 21174188 A 20210517

Priority

US 202117249163 A 20210222

Abstract (en)

Techniques are described for providing fast reroute for BUM traffic in EVPN. For example, a first provider edge (PE) device, elected as a designated forwarder (DF) of an Ethernet segment, configures a backup path using a label received from a second PE device of the Ethernet segment (e.g., backup DF) that identifies the second PE device as a "protector" of the Ethernet segment. For example, a routing component of the DF configures within a forwarding component a backup path to the second PE device, e.g., installing the label and operation(s) within the forwarding component to cause the forwarding component to add the label to BUM packets received from a core network. Therefore, when an access link to the local CE device has failed, the DF reroutes BUM packets from the core network via the backup path to the second PE device, which sends the BUM packets to the CE device.

IPC 8 full level

H04L 12/46 (2006.01)

CPC (source: CN EP US)

H04L 12/4641 (2013.01 - CN); **H04L 12/4645** (2013.01 - EP); **H04L 12/4675** (2013.01 - EP); **H04L 45/02** (2013.01 - US); **H04L 45/16** (2013.01 - US); **H04L 45/22** (2013.01 - CN US); **H04L 45/28** (2013.01 - CN); **H04L 45/50** (2013.01 - CN US); **H04L 45/74** (2013.01 - CN); **H04L 47/32** (2013.01 - US); **H04L 12/4633** (2013.01 - EP)

Citation (applicant)

- US 7990993 B1 20110802 - GHOSH KAUSHIK [US], et al
- US 8806058 B1 20140812 - MACKIE SCOTT [US], et al

Citation (search report)

- [I] EP 3641240 A1 20200422 - JUNIPER NETWORKS INC [US]
- [A] US 2019007309 A1 20190103 - ARORA KAPIL [IN], et al
- [A] US 2016021015 A1 20160121 - THORIA SAMIR D [US], et al
- [A] SAJASSI A ET AL: "BGP MPLS-Based Ethernet VPN; draft-ietf-bess-rfc7432bis-00.txt", 22 December 2020 (2020-12-22), pages 1 - 65, XP015143442, Retrieved from the Internet <URL:https://tools.ietf.org/html/draft-ietf-bess-rfc7432bis-00> [retrieved on 20201222]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 4047883 A1 20220824; CN 114978975 A 20220830; CN 114978975 B 20240604; CN 118433088 A 20240802; US 11570086 B2 20230131; US 2022272027 A1 20220825; US 2023126279 A1 20230427

DOCDB simple family (application)

EP 21174188 A 20210517; CN 202110523670 A 20210513; CN 202410624630 A 20210513; US 202117249163 A 20210222; US 202218146309 A 20221223